UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,962	06/24/2003	Ronald W. Jocher	67108-016; Jocher 11	1188

26096 7590 03/21/2007
CARLSON, GASKEY & OLDS, P.C.
400 WEST MAPLE ROAD
SUITE 350
BIRMINGHAM, MI 48009

EXAMINER	
TRAN, TUAN A	
ART UNIT	PAPER NUMBER
2618	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/602,962	JOCHER, RONALD W.	
	Examiner	Art Unit	
	Tuan A. Tran	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16 and 18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1-16 and 18 are rejected under 35 U.S.C. 102(a) as being anticipated by Barna et al. (2002/0154066).

Regarding claim 1, Barna discloses an apparatus and arrangements of using a wireless terminal internal antenna (See figs. 2-3) for communication through a physical line 18 (See fig. 4), comprising: proximity coupling the wireless terminal internal antenna with a strip line conductor 20 connected to the physical line 18, wherein the strip line conductor has a first geometry configuration and the wireless terminal internal antenna has a second different geometry configuration (See figs. 1-5 and page 3 [0065-0066]).

Regarding claims 2-4, Barna discloses as cited in claim 1. Barna further discloses receiving a wireless transmitted signal from the terminal internal antenna and transmitting the signal along the physical line 18 (See figs. 4-5 and page 3 [0065-0066]).

Regarding claim 5, Barna discloses as cited in claim1. Barna further discloses placing the strip line conductor 20 adjacent a casing of the wireless terminal 10 (See fig. 1).

Regarding claim 6, Barna discloses as cited in claim1. Barna further using an H-field coupling (electromagnetic coupling comprises H-field and E-field couplings) between the wireless terminal internal antenna and the strip line conductor 20 (See figs. 4-5 and page 3 [0065-0066]).

Regarding claims 7, 10 and 12, Barna discloses a device 12, 14 (See fig. 1) for coupling a wireless terminal 10 having a housing and an internal antenna for receiving and transmitting wireless signals (See figs. 1-3) to a physical line 18, comprising: a strip line conductor 20 adapted to be placed adjacent to the housing and near the internal antenna of the wireless terminal 10 to establish a proximity coupling between the conductor 20 and the internal antenna, wherein the strip line conductor has a first geometry configuration and the wireless terminal internal antenna has a second different geometry configuration (See figs. 1-5 and page 3 [0065-0066]).

Regarding claims 8 and 11, Barna discloses as cited in claims 7 and 10. The planar antenna as disclosed by Barna is widely known to have a dielectric layer for supporting the conductor 20 on one side and a ground plane 24 on another side of the dielectric layer (See fig. 5).

Regarding claim 9, Barna discloses as cited in claim7. Barna further a connector 16 electrically coupled to the strip line conductor 20 adapted to be connected to a physical conductive line 18 (See fig. 5).

Regarding claim 13, Barna discloses as cited in claim12. Barna further a holder 12 for securing the strip line conductor 20 in a desired position against the housing (See fig. 1).

Regarding claim 14, Barna discloses as cited in claim 1. Barna further discloses the use of electromagnetic coupling (comprising H-field and E-field coupling) between the wireless terminal internal antenna and the strip line conductor 20 (See figs. 4-5 and page 3 [0065-0066]).), wherein the arrangement between the wireless terminal internal antenna and the strip line conductor 20 develops a near-field coupling wherein the expression near-field is widely known to mean that the H-portion dominates.

Claim 18 is rejected for the same reasons as set forth in claim 14.

Regarding claims 15-16, Barna discloses as cited in claims 7 and 10. Barna further discloses the use of electromagnetic coupling (comprising H-field and E-field coupling) between the wireless terminal internal antenna and the strip line conductor 20 (See figs. 4-5 and page 3 [0065-0066]).), wherein the arrangement between the wireless terminal antenna and the strip line develops a near-field coupling wherein the expression near-field is widely known to mean that the H-portion dominates.

Response to Arguments

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Tran whose telephone number is (571) 272-7858. The examiner can normally be reached on Mon-Fri, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tuan Tran
AU 2618